



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 17 91 49 05

Classification of the application (IPC):
H01Q 1/24, H01Q 9/30, H01Q 1/22, H01Q 9/42

Technical fields searched (IPC):
H01Q

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X A	US 2002152606 A1 (HUANG CHI-FANG [TW]) 24 October 2002 (2002-10-24) * paragraphs [0003], [0014], [0015], [0018]; figures 1,3 *	1-4 5-8
A	US 2010321325 A1 (SPRINGER GREGORY A [US] ET AL) 23 December 2010 (2010-12-23) * paragraphs [0027] - [0032], [0035] - [0037], [0040], [0043], [0048] - [0050]; figures 3,5,6,7 *	1-8
A	US 2011298670 A1 (JUNG BYUNGWOON [KR] ET AL) 08 December 2011 (2011-12-08) * paragraphs [0092], [0093], [0109] - [0129]; figures 3-5, 6A, 6B, 8A, 8B, 9, 10 *	1-8
A	US 2001013841 A1 (DISHART PETER T [US] ET AL) 16 August 2001 (2001-08-16) * paragraphs [0018], [0021], [0030]; figures 1-3 *	1-8

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search The Hague	Date of completion of the search 31 March 2020	Examiner Georgiadis, A
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CATEGORY OF CITED DOCUMENTS

X: particularly relevant if taken alone	P: intermediate document
Y: particularly relevant if combined with another document of the same category	T: theory or principle underlying the invention
A: technological background	E: earlier patent document, but published on, or after the filing date
O: non-written disclosure	D: document cited in the application
& : member of the same patent family, corresponding document	L: document cited for other reasons

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ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on 31-03-2020.
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